

### ABSTRACT OF THE DISCLOSURE

An apparatus for stabilizing a vessel is provided. The apparatus, or "hydrogyroscope," includes a liquid container disposed along the hull of a floating vessel. The liquid container provides a rotational flow path therein for a spinning liquid mass. The liquid container also preferably includes a valve for receiving water or other liquid into the rotational flow path of the container. The liquid is preferably supplied from the marine environment in which the vessel operates. In one embodiment, a motor is provided for rotating the liquid container, causing the water to rotate along the rotational flow path within the container and relative to the hull of the vessel. A method is also provided for stabilizing the vessel. The method in one embodiment includes the steps of moving the vessel to a desired location within a marine body, filling the liquid container of the vessel stabilizing apparatus, and actuating a motor that causes liquid to flow along the rotational flow path of the liquid container.